



June 24, 2016

Tom Moe USS Corporation P.O. Box 417 8771 Park Ridge Dr Mountain Iron, MN 55768

RE: Project: NPDES-TB WK 3 Pace Project No.: 1268349

Dear Tom Moe:

Enclosed are the analytical results for sample(s) received by the laboratory on June 15, 2016. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Melisa M Woods

Massia Wirds

melisa.woods@pacelabs.com

Project Manager

Enclosures

cc: Cory Hertling Terri Sabetti, NTS



315 Chestnut Street Virginia, MN 55792 (218) 742-1042



CERTIFICATIONS

Project: NPDES-TB WK 3

Pace Project No.: 1268349

Virginia Minnesota Certification ID's

315 Chestnut Street, Virginia, MN 55792

Alaska Certification #MN01084

Arizona Department of Health Certification #AZ0785

Minnesota Dept of Health Certification #: 027-137-445

North Dakota Certification: # R-203

Wisconsin DNR Certification #: 998027470 WA Department of Ecology Lab ID# C1007

Nevada DNR #MN010842015-1

Oklahoma Department of Environmental Quality

Duluth Minnesota Cerification ID's

4730 Oneota St., Duluth, MN 55807

Minnesota Dept of Health Certification #: 027-137-152

Wisconsin DNR Certification #: 999446800

North Dakota Certification #: R-105





SAMPLE SUMMARY

Project: NPDES-TB WK 3

Pace Project No.: 1268349

Lab ID	Sample ID	Matrix	Date Collected	Date Received
1268349001	SD 001 (Seep 020)	Water	06/15/16 11:15	06/15/16 14:30





SAMPLE ANALYTE COUNT

Project: NPDES-TB WK 3

Pace Project No.: 1268349

				Analytes	
Lab ID	Sample ID	Method	Analysts	Reported	Laboratory
1268349001	SD 001 (Seep 020)	EPA 1664 TPH	BT1	1	PASI-DUL
		USGS I-3765	BEM	1	PASI-V

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ANALYTICAL RESULTS

Project: NPDES-TB WK 3

Pace Project No.: 1268349

Date: 06/24/2016 01:28 PM

Sample: SD 001 (Seep 020)	Lab ID:	1268349001	Collecte	d: 06/15/1	6 11:15	Received: 06	/15/16 14:30 Ma	trix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1664 SGT-HEM, TPH	Analytical	Method: EPA	1664 TPH						
Total Petroleum Hydrocarbons	ND	mg/L	3.0	0.91	1		06/20/16 17:58		
USGS I-3765 TSS	Analytical	Method: USG	S I-3765						
Total Suspended Solids	3.6	mg/L	1.0	1.0	1		06/21/16 12:58		



QUALITY CONTROL DATA

Project: NPDES-TB WK 3

Pace Project No.: 1268349

QC Batch: DUL/7601 Analysis Method: EPA 1664 TPH
QC Batch Method: EPA 1664 TPH Analysis Description: 1664 SGT-HEM, TPH

Associated Lab Samples: 1268349001

METHOD BLANK: 332203 Matrix: Water

Associated Lab Samples: 1268349001

Blank Reporting
Parameter Units Result Limit MDL Analyzed Qualifiers

Total Petroleum Hydrocarbons mg/L ND 3.0 0.90 06/20/16 16:40

LABORATORY CONTROL SAMPLE: 332204

Spike LCS LCS % Rec Parameter Units Conc. Result % Rec Limits Qualifiers 75 Total Petroleum Hydrocarbons mg/L 20 15.0 64-132

MATRIX SPIKE SAMPLE: 332205

Date: 06/24/2016 01:28 PM

1268463001 MS Spike MS % Rec Parameter Units Result Conc. Result % Rec Limits Qualifiers 1.4J 18.7 64-132 Total Petroleum Hydrocarbons 21.1 83 mg/L

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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QUALITY CONTROL DATA

Project: NPDES-TB WK 3

Pace Project No.: 1268349

QC Batch: WET/24753 Analysis Method: USGS I-3765

QC Batch Method: USGS I-3765 Analysis Description: USGS I-3765 Total Suspended Solids

Associated Lab Samples: 1268349001

METHOD BLANK: 332877 Matrix: Water

Associated Lab Samples: 1268349001

Blank Reporting
Parameter Units Result Limit MDL Analyzed Qualifiers

Total Suspended Solids mg/L ND 1.0 06/21/16 12:57

LABORATORY CONTROL SAMPLE: 332878

Spike LCS LCS % Rec Parameter Units Conc. Result % Rec Limits Qualifiers **Total Suspended Solids** mg/L 239 238 100 80-120

SAMPLE DUPLICATE: 332879

1268501003 Dup Max **RPD RPD** Parameter Units Result Result Qualifiers 232 228 2 10 Total Suspended Solids mg/L

SAMPLE DUPLICATE: 332880

Date: 06/24/2016 01:28 PM

1268425002 Dup Max RPD RPD Parameter Units Result Result Qualifiers 28.0 Total Suspended Solids mg/L 26.0 7 10

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



QUALIFIERS

Project: NPDES-TB WK 3

Pace Project No.: 1268349

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

Date: 06/24/2016 01:28 PM

PASI-DUL Pace Analytical Services - Duluth
PASI-V Pace Analytical Services - Virginia

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: NPDES-TB WK 3

Pace Project No.: 1268349

Date: 06/24/2016 01:28 PM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
1268349001	SD 001 (Seep 020)	EPA 1664 TPH	DUL/7601		
1268349001	SD 001 (Seep 020)	USGS I-3765	WET/24753		

Section A

Required Client Information:
Company: USS Corporati

Required Project Information:

Report To: Section B

Tom Moe

USS Corporation

CHAIN-OF-CUSTODY / Analytical Request Document M0#:1268349

The Chain-of-Custody is a LEGAL DOCUMENT. All relevar

Invoice Information: Section C

PM: MMW

Due Date: 06/29/16

Attention:

At. Iron, MN 55768 4 ddress: 10 lequested Due Date: ITEM# 6 Ó SD 001 (Seep 020) P.O. Box 417 SAMPLE ID
One Character per box.
(A-Z, 0-91, -) Sample kds must be unique ADDITIONAL COMMENTS MATRIX
Drinking Water
Water
Waste Water
Product
Soil/Soild
Oil
Wipe
Air
Other Purchase Order #: Project Name: Project #: Copy To: TIS OF ARREST OF RELINGUISHED BY / AFFILIATION MATRIX CODE (see valid codes to left) (culnewite ₹ SAMPLE TYPE (G=GRAB C=COMP) NPDES-TB Wk3 51,11 WAY ST.11 WAY START SAMPLER NAME AND SIGNATURE TIME COLLECTED SIGNATURE of SAMPLER: PRINT Name of SAMPLER: DATE 1 11/5/19 T NE DATE SAMPLE TEMP AT COLLECTION 14,30 # OF CONTAINERS Pace Profile #: Pace Project Manager: Address: Company Name: TIME ace Quote: Vanlnains an may. Unpreserved H2SO4 ниоз Preservatives HCI NaQH ACCEPTED BY / AFFILIATION Na2S2O3 heather.zika@pacelabs.com, Methanol Other Y/N **Analyses Test** TSS DATE Signed: TRPH 1664 CLIENT: USS CORP 6-15-6 DATE 1430 TIME 53 TEMP in C Residual Chlorine (Y/N) Received on SAMPLE CONDITIONS Ice (Y/N) Custody Sealed 7 Coaler (Y/N) Samples (Intact (Y/N)

Pace Analytical*

Document Name: Sample Condition Upon Receipt Form

Document No.:

Document Revised: 23Feb2015 Page 1 of 1

Issuing Authority:

Packing Material: Bubble Wrap Bubble Bags None Other: Temp Blank? Yes Thermometer Used: 140792808 Type of Ice: Wet Blue None Samples on ice, cooling process has Cooler Temp Read *C: 5 \cdot \cdo			F-V IVI-C-U	U1-KEV.U9	Pace Virginia, Minnesota Quality Office
Commercial Pace Other: 1268349		195		Project	₩0#:1268349
Tracking Number: Custody Seal on Cooler/Box Present? Yes No Seals Intact? Yes No Optional: Proj. Due Date: Proj. Nam Packing Material: Blubble Wrap Blubble Bags None Other: Temp Blank? Yes No None Samples on ice, cooling process has Cooler Temp Read 'C: 5 · 3 Biological Tissue Frozen? Yes No None None	<u> </u>	_	7	Client	1268349
Packing Material: Blubble Wrap Blubble Bags None Other: Temp Blank? Yes Thermometer Used: 140792808 Type of Ice: Wet Blue None Samples on Ice, cooling process has Type of Ice: Wet Blue None Samples on Ice, cooling process has Type of Ice: Wet Blue None Samples on Ice, cooling process has Type of Ice: Wet Blue None Samples on Ice, cooling process has Type of Ice: Wet Blue None Samples on Ice, cooling process has Type of Ice: Wet Blue None Samples on Ice, cooling process has Type of Ice: Wet Blue None Samples on Ice, cooling process has Type of Ice: Wet Blue None Samples on Ice, cooling process has Type of Ice: Wet Blue None Samples on Ice, cooling process has Type of Ice: Wet Blue None Samples on Ice, cooling process has Type of Ice: Wet Blue None Samples on Ice, cooling process has Type of Ice: Wet Blue None Samples on Ice, cooling process has Type of Ice: Wet Type No Nole Nole Type No Nole Type No Nole Type No Nole Type Nole Type Nole Nole Type Type Type Nole Nole Type Typ	· 				
Type of ice: Wet Blue None Samples on ice, cooling process has Cooler Temp Read *C: 5 .	Custody Seal on Cooler/Box Present?	ĺΝο	Seals Ir	ntact? [Yes No Optional: Proj. Due Date: Proj. Name:
Cooler Temp Read *C: 5 . Cooler Temp Corrected *C: 5 . 7 Biological Tissue Frozen?	Packing Material: Bubble Wrap Bubble Ba	gs 🗹 N	one [Other:_	Temp Blank? 📈 Yes 🔲 No
Cooler Temp Read *C: 5 . Cooler Temp Corrected *C: 5.73 Biological Tissue Frozen?	Thermometer Used: 🔀 140792808	Type of	Ice: 🔀	Wet [Blue None Samples on ice, cooling process has begu
Chain of Custody Filled Out? Chain of Custody Relinquished? Sampler Name and Signature on COC? Sampler Name and Signature on COC? Samples Arrived within Hold Time? Short Hold Time Analysis (<72 hr)? Rush Turn Around Time Requested? Sufficient Volume? Correct Containers Used? Pece Containers Used? Pece Containers Used? Pece Containers Intact? Filtered Volume Received for Dissolved Tests? Sample labels Match COC? Includes Date/Time/ID/Analysis Matrix: All containers needing acid/base preservation will be checked and documented in the pH logbook. Headspace in Methyl Mercury Container Headspace in WOA Vials (>6 mm)? Trip Blank Custody Seals Present? Yes No Date/Time: Date/Time: Date/Time: Date/Time: Da	Cooler Temp Read °C: 5.0 Cooler Temp Cooler Temp Cooler Temp Correction Fac	orrected *(c: <i></i> 3		d Initials of Person Examining Contents: 6-15-16 4
Chain of Custody Relinquished? Jyes	Chain of Custody Present?	Z Yes	□No	□N/A	1.
Sampler Name and Signature on COC? Yes	Chain of Custody Filled Out?	☑ Yes	□No	□N/A	2.
Samples Arrived within Hold Time?	Chain of Custody Relinquished?	Yes	□No	□N/A	3.
Short Hold Time Analysis (-72 hr)?	Sampler Name and Signature on COC?	Yes	□No	□N/A	4.
Rush Turn Around Time Requested?	Samples Arrived within Hold Time?	ZYes	□No	□N/A	5.
Sufficient Volume? Zyes No N/A 8. Correct Containers Used? Zyes No N/A 9. Pace Containers Used? Zyes No N/A 10. Filtered Volume Received for Dissolved Tests? Yes No ZN/A 11. Note if sediment is visible in the dissolved containers. Sample Labels Match COC? Yes No N/A 12. Includes Date/Time/ID/Analysis Matrix: Zyes No ZN/A 12. All containers needing acid/base preservation will be checked and documented in the pH logbook. Yes No ZN/A 13. Headspace in Methyl Mercury Container Yes No ZN/A 14. Trip Blank Present? Yes No ZN/A 14. Trip Blank Custody Seals Present? Yes No ZN/A 15. Trip Blank Custody Seals Present? Yes No ZN/A Pace Trip Blank Lot # (if purchased): Date/Time: CLIENT NOTIFICATION/RESOLUTION Date/Time: Date/Time:	Short Hold Time Analysis (<72 hr)?	Yes	ZÎNo	□N/A	6.
Correct Containers Used? Pace Containers Used? Pace Containers Used? Pace Containers Used? Pace Containers Intact? Person Containers Intact? Pace Trip Blank Present? Pace Trip Blank Lot # (if purchased): Containers Intact? Pace Containers Intact? Pace Trip Blank Lot # (if purchased): Pace Containers Used? Pace Trip Blank Lot # (if purchased): Pace Containers Used? Pace Trip Blank Lot # (if purchased): Pace Containers Used? Pace Containers Used? Pace Trip Blank Lot # (if purchased): Pace Containers Used? Pace Trip Blank Lot # (if purchased):	Rush Turn Around Time Requested?	☐Yes	[Z]No	□N/A	7.
Pace Containers Used? Containers Intact? Filtered Volume Received for Dissolved Tests? Yes No N/A 10. Filtered Volume Received for Dissolved Tests? Yes No N/A 11. Note if sediment is visible in the dissolved containers. Sample Labels Match COC? Includes Date/Time/ID/Analysis Matrix: Yes No N/A 12. All containers needing acid/base preservation will be checked and documented in the pH logbook. Headspace in Methyl Mercury Container Yes No N/A 13. Headspace in VOA Vials (>6mm)? Yes No N/A 14. Trip Blank Present? Yes No N/A 15. Trip Blank Custody Seals Present? Yes No N/A 15. Trip Blank Lot # (if purchased): CLIENT NOTIFICATION/RESOLUTION Person Contacted: Date/Time: Field Data Required? Yes No Date/Time:	Sufficient Volume?	✓Yes	□No	□N/A	8.
Containers Intact? Yes	Correct Containers Used?		□No	□N/A	9.
Filtered Volume Received for Dissolved Tests? Yes	-Pace Containers Used?	Z Yes	□No	□N/A	
Sample Labels Match COC? Includes Date/Time/ID/Analysis Matrix: All containers needing acid/base preservation will be checked and documented in the pH logbook. Headspace in Methyl Mercury Container Headspace in VOA Vials (>6mm)? Yes No NA 13. Headspace in VOA Vials (>6mm)? Yes No NA 14. Trip Blank Present? Trip Blank Custody Seals Present? Pace Trip Blank Lot # (if purchased): CLIENT NOTIFICATION/RESOLUTION Person Contacted: Date/Time:	Containers Intact?	Yes	□No	□N/A	10.
-Includes Date/Time/ID/Analysis Matrix: All containers needing acid/base preservation will be checked and documented in the pH logbook. Headspace in Methyl Mercury Container Headspace in VOA Vials (>6mm)? Trip Blank Present? Trip Blank Custody Seals Present? Pace Trip Blank Lot # (if purchased): CLIENT NOTIFICATION/RESOLUTION Person Contacted: Date/Time:	Filtered Volume Received for Dissolved Tests?	Yes	□No	ØN/A	11. Note if sediment is visible in the dissolved containers.
checked and documented in the pH logbook. Headspace in Methyl Mercury Container Yes No No N/A 13. Headspace in VOA Vials (>6mm)? Yes No No N/A 14. Trip Blank Present? Yes No No N/A 15. Trip Blank Custody Seals Present? Yes No No N/A Pace Trip Blank Lot # (if purchased): CLIENT NOTIFICATION/RESOLUTION Person Contacted: Date/Time:		2 Três	∏No	□N/A	12.
Headspace in VOA Vials (>6mm)?		·□Yes	□No	ZIN/A	See pH log for results and additional preservation documentation
Trip Blank Present?	Headspace in Methyl Mercury Container	☐Yes	□No	ĎN/A	13.
Trip Blank Custody Seals Present?	Headspace in VOA Vials (>6mm)?	Yes	□No	□N/A	14.
Pace Trip Blank Lot # (if purchased): CLIENT NOTIFICATION/RESOLUTION Person Contacted: Date/Time:				7	15.
CLIENT NOTIFICATION/RESOLUTION Person Contacted: Date/Time:	·	Yes	□No	Ø N/A	
Person Contacted: Date/Time:	Pace Trip Blank Lot # (if purchased):				
Commonta (Doubletian)					Field Data Required? Yes No
Comments/Resolution:					Date/Time:
	Comments/Resolution:				

FECAL WAIVER ON FILE Y

TEMPERATURE WAIVER ON FILE

Project Manager Review:

hold, incorrect preservative, out of temp, incorrect containers)

Intra-Regional Chain of Custody



Coole	4	ω	2	_	Transfers		5	4	ω	2)	1 8	liem «	Melisa	Report To:	Phone	315 C	Pace,	Received at:	Work
Cooler Temperature on Receipt						754 /PER 1820 JAN 775				1000	SD 001 (Seep 020)	Sample ID	Melisa M Woods	t To:	Phone (218) 742-1042	315 Chestnut Street	Pace Analytical Virginia	ed at:	Workorder: 1268349
rature on				1	Released By						020)				-1042	707 199	/irginia		68349
Receipt																			Work
<u>-</u>				\							PS	Sample Type							Workorder Name: NPDES-TB WK 3
ဂိ				GRA	Date					0,10,20,10	6/15/2016 11:15	Collect Date/Time			뫈	473	Pa	Sen	ame: N
Custo				GAGILUIA c	Date/Time						_				one (218)	4730 Oneota Street	ce Analyti	Send To Lab:	PDES-T
Custody Seal (Y)or				Kustrus Polson	Received By					200010001	1268349001	Lab ID			Phone (218) 727-6380	Street	Pace Analytical Duluth		BWK3
or N	/			ang Po	ÿ						Water	Watrix							
				Work						2	2	HCL	Preser					Section 1	
Receive				ગા]જ									Preserved Container						Owner
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or N																		Re	r Received Date: 6/15/2016
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Sai						Cor												∖nalysis	Due
mples in						Comments						· · ·							Date: 6
Samples Intact(Y) or)									$\frac{1}{1}$									Due Date: 6/29/2016
or N												LAB USE ONLY							တ
												ONLY							

This chain of custody is considered complete as is since this information is available in the owner laboratory.

^{***}In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC document.

	D	ocument	Name:	Document Revised: 22Jan2016	
	Sample Con	dition Up	on Receipt		
Pace Analytical "		Document		Issuing Authority: Pace Virginia, Minnesota Quality Office	
	F-1	OUL-C-001	-Rev.01	Pace Virginia, Minnesota Quanty Office	
mple Condition Client Name: Upon Receipt		Р	roject #:		
Courier: Fed Ex UPS		Clie			
Commercial Pac	eOther:_			·	
ustody Seal on Cooler/Box Present?	: No	Seals Int	act? 🔨	Yes No Optional: Proj. Due Date: Proj. Name:	
acking Material: Bubble Wrap		ne 🗌	Other:	Temp Blank? 🔎 Yes 🔲 N	0
ermometer Used: 🗶 800051		ce: ۷	Vet	Blue None Samples on ice, cooling process has b	egi
					X-I
ooler Temp Read °C: 0.5 Cooler np should be above freezing to 6°C Correct	Temp Corrected *C tion Factor: <u>*F* O 、C</u>	<u>e</u> • <u>c</u>	Date and	. Biological Tissue Frozen? Yes No Initials of Person Examining Contents: Comments:	
Chain of Custody Present?	X Yes	□No	□n/a	1.	
Chain of Custody Filled Out?	∑ (Yes	□No	□n/a	2.	
Chain of Custody Relinquished?	Yes	[]No	□n/A	3.	
Sampler Name and Signature on COC?	□Yes	□No	- E N/A	4.	
Samples Arrived Within Hold Time?	∑ Yes	□No	□N/A	5.	
Short Hold Time Analysis (<72 hr)?	∐Yes	MNο	□N/A	6.	
Rush Turn Around Time Requested?	[]Yes	∫⊠Nο	□n/a	7.	
Sufficient Volume?	₩	□No	□N/A	8.	
Correct Containers Used?	· Yes	□No	□N/A	9.	
Pace Containers Used?	⊠ Yes	□No	∏N/A		,
	¥⊒Yes	□No	□N/A	10.	
Containers Intact? Filtered Volume Received for Dissolved Tests?	□Yes	· No	□N/A	11. Note if sediment is visible in the dissolved containers.	
	Yes	□No		12.	
Sample Labels Match COC?	ωτ τω	□140	<i>ب</i> ،		
-Includes Date/Time/ID/Analysis Matrix:				See pH log for results and additional preserva	tic
All containers needing acid/base preservation checked and documented in the pH logbook.		∏No	N/A	documentation	
Headspace in Methyl Mercury Container	Yes	□No	□N/A	13.	
Headspace in VOA Vials (>6mm)?	Yes	□No	□N/A		
	F	mi.	II → 1/4	. 15.	
Trip Blank Present?	∐Yes	No	I DN/A		
Trip Blank Present? Trip Blank Custody Seals Present?	∐Yes ∏Yes	□No	IDN/A		-

Pace Field Data Required? Yes No CLIENT NOTIFICATION/RESOLUTION Date/Time: Person Contacted: Comments/Resolution:

FECAL WAIVER ON FILE

TEMPERATURE WAIVER ON FILE

Project Manager Review: Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of

hold, incorrect preservative, out of temp, incorrect containers)